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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/637,624

08/11/2003

Yoshimi Uda

03500.016023.1

2087

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7590

02/23/2005

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EXAMINER

SANTIAGO, MARICELI

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary****Application No.**

10/637,624

**Applicant(s)**

UDA ET AL.

**Examiner**

Mariceli Santiago

**Art Unit**

2879

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 August 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-19, 21, 24 and 25 is/are allowed.
- 6) ☒ Claim(s) 13-16, 20, 22 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 10/014,398.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

The Amendment, filed on August 11, 2003, has been entered and acknowledged by the Examiner.

Cancellation of claims 1-12 has been entered.

Claims 13-25 are pending in the instant application.

### *Specification*

The current status of all nonprovisional parent applications referenced should be included. Reference to prior art applications should be updated to include “, now U.S. Patent No. 6,621,207.”

### *Double Patenting*

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 13-16, 20 and 22 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6, 8 and 12 of U.S. Patent No. 6,621,207. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons.

U.S. Patent No. 6,621,207	U.S. Application SN 10/637,624
<p>Claim 1 states a substrate having a fine line, wherein the fine line comprises plural recesses arranged at intervals at least in a part in the longitudinal direction of the fine line.</p>	<p>Claim 13 recites a substrate having a fine line, wherein the fine line comprises a recess at an end portion of the fine line. Patent '207 claims locating the recess in a part of the line, it fails to claim the recess located at an end portion of the line.</p> <p>However, one of ordinary skills in the art would reasonable contemplate positioning the recess at an end portion of the line since rearranging of parts of an invention involves only routine skills in the art. <i>In re Japikse</i>, 86 USPQ 70. Thus, it would have been obvious to one having ordinary skills in the art the time the invention was made to provide the recess at the end portion of the wiring, since rearrangement of parts of an invention is considered within the skills of the art.</p>
<p>Claim 8 states wherein the fine line is obtained by providing the substrate with paste-like material and then heating the material.</p>	<p>Claim 14 recites wherein the fine line is obtained by heating a material which is provided on the substrate.</p>
<p>Claim 1 states a substrate having a fine line, wherein the fine line comprises plural recesses arranged at intervals at least in a part in the longitudinal direction of the fine line.</p>	<p>Claim 15 recites wherein the fine line has a portion other than the recess. Patent '207 fails to claim the limitation of the portion other than the recess being thicker than 5 <math>\mu</math>. However, where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide he portion other than the recess being thicker than 5 <math>\mu</math>, since optimization of workable ranges is considered within the skill of the art.</p>
<p>Claim 6 states wherein the fine line is a wiring.</p>	<p>Claim 16 recites wherein the fine line is a wiring for a device.</p>
<p>Claim 12 states an image display apparatus comprising a substrate and an electron-emitting</p>	<p>Claim 20 recites an image display apparatus comprising a substrate having a device and a</p>

<p>device, the substrate having a fine line, wherein the fine line comprises a recess at least in a part of the fine line, wherein the fine line is used as a wiring for driving the electron-emitting device.</p>	<p>wiring for the device, wherein the wiring comprises a recess at an end portion of the wiring. While Patent '207 claims locating the recess in a part of the line, it fails to claim the recess located at an end portion of the wiring. However, one of ordinary skills in the art would reasonable contemplate positioning the recess at an end portion of the line since rearranging of parts of an invention involves only routine skills in the art. <i>In re Japikse</i>, 86 USPQ 70. Thus, it would have been obvious to one having ordinary skills in the art the time the invention was made to provide the recess at the end portion of the wiring, since rearrangement of parts of an invention is considered within the skills of the art.</p>
<p>Claim 12 states an image display apparatus comprising an electron-emitting device.</p>	<p>Claim 22 recites wherein the device comprises an electron-emitting device.</p>
<p>Claim 12 states wherein the fine line is used as a wiring for driving the electron-emitting device.</p>	<p>Patent '207 fails to claim a device comprising a plurality of devices, wherein the wiring connects the devices as a part of matrix wirings as recited in claim 23. However, an image display apparatus is well known to comprise plural emitting-devices arranged in matrix configuration driven by wiring elements. Accordingly, one of ordinary skills in the art would reasonable contemplate the use and rearrangement of plural emitting devices and respective wirings in a matrix configuration in order to provide the multiple electron emitting elements required for operation of an image display apparatus.</p>

***Allowable Subject Matter***

Claims 17-19, 21, 24 and 25 are allowed over the prior art of record.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 17, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 17, and specifically comprising the limitation of the fine line comprises an end portion, a portion other than the end portion and a recess at the end portion, the portion other than the end portion having a width narrower than a width of the end portion.

Regarding claims 18 and 19, claims 18 and 19 are allowable for the reasons given in claim 17 because of their dependency status from claim 17.

Regarding claim 21, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 21, and specifically comprising the limitation of the wiring comprises an end portion, a portion other than the end portion and a recess at the end portion, the portion other than the end portion having a width narrower than a width of the end portion.

Regarding claims 24 and 25, claims 24 and 25 are allowable for the reasons given in claim 21 because of their dependency status from claim 21.

***Other Prior Art Cited***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariceli Santiago whose telephone number is (571) 272-2464. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*msg 2/22/05*  
Mariceli Santiago  
Patent Examiner  
Art Unit 2879